

# IMG/M Publications

## Systems and Methods

1. Markowitz VM, Ivanova N, Palaniappan K, Szeto E, Korzeniewski F, Lykidis A, Anderson I, Mavromatis K, Kunin V, Garcia Martin H, Dubchak I, Hugenholz P, Kyrpides NC. **2006**. An Experimental Metagenome Data Management and Analysis System, *Bioinformatics*, **22**(14), 359-367.
2. Mavromatis K, Ivanova N, Barry K, Shapiro H, Gotsman E, McHardy AC, Rigoutsos I, Salamov A, Korzeniewski F, Land M, Lapidus A, Grigoriev I, Hugenholz P, Kyrpides NC. **2007**. On the fidelity of processing metagenomic sequences using simulated dataset. *Nature Methods*, **6**, 495-500.
3. Markowitz VM, Ivanova N, Szeto E, Palaniappan K, Chu K, Dalevi D, Chen IM, Grechkin Y, Dubchak I, Anderson I, Lykidis A, Mavromatis K, Hugenholz P, Kyrpides NC. **2008**. IMG/M: a data management and analysis system for metagenomes, *Nucleic Acids Research* **36**, D534 - D538.
4. Dalevi D, Ivanova, NN, Mavromatis K, Hooper S, Szeto E, Hugenholz P, Kyrpides NC, and Markowitz VM. **2008**. Annotation of metagenome short reads using proxygenes. Accepted for publication. *Bioinformatics*, **24** (18).

## Biology

### 2006

1. Martin HG, Ivanova NN, Kunin V, Warnecke F, Barry KW, McHardy AC, Yeates C, He S, Salamov AA, Szeto E, Dalin E, Putnam NH, Shapiro HJ, Pangilinan JL, Rigoutsos I, Kyrpides NC, Blackall LL, McMahon KD, Hugenholz P. **2006**. Metagenomic analysis of two enhanced biological phosphorus removal (EBPR) sludge communities. *Nature Biotechnology*, **24**, 1263-1269.
2. Woyke T, Teeling H, Ivanova NN, Huntemann M, Richter M, Gloeckner FO, Biffelli D, Anderson I, Barry KW, Shapiro HJ, Szeto E, Kyrpides NC, Mussmann M, Amann R, Bergin C, Ruehland C, Rubin EM, Dubilier N. **2006**. Symbiosis insights through metagenomic analysis of a microbial consortium. *Nature*, 443:950-955.

## 2007

1. Marcy Y, Ouverney C, Bik EM, Losekann T, Ivanova N, Garcia Martin H, Szeto E, Platt D, Hugenholtz P, Relman DA, Quake SR. **2007**. Dissecting biological dark matter: single cell genetic analysis of TM7, a rare and uncultivated microbe from the human mouth. *Proceedings of the National Academy of Sciences*, **104**(29), 11889-11894.
2. Kunin, V, He S, Warnecke F, Peterson SB, Garcia Martin H, Haynes M, Ivanova N, Blackall LL, Breitbart M, Rohwer FL, McMahon KD, Hugenholtz P. **2007**. A bacterial metapopulation adapts locally to phage predation despite global dispersal. Submitted for publication (PLoS Biology).
3. Warnecke F, Luginbuhl P, Ivanova N, Ghassemian M, Richardson TH, Stege JT, Djordjevic N, Aboushadi N, Sorek R, Tringe SG, et al. **2007**. Metagenomic and functional analysis of hindgut microbiota of a wood feeding higher termite. *Nature* **450**, 560-565.

## 2008

1. Kunin V, Raes J, Harris, JK, Spear JR, Walker JJ, Ivanova N, et al. **2008**. Millimiter-scale genetic gradients and community-level molecular convergence in a hypersaline microbial mat. *Molecular Systems Biology* **4**:198.
2. Kalyuzhnaya MG, Lapidus A, Ivanova N, Copeland AC, McHardy AC, et al. **2008**. High-resolution metagenomics targets major functional types in complex microbial communities. *Nature Biotechnology*, doi:10.1038/nbt.1488.